DO NOT USE THIS AREA AS IT WILL DISAPPEAR IN THE POSTER CLAMPS



## Smolt Quality During Different Times in the Smoltification Process in Atlantic Salmon (Salmo Salar)



Av Truls Haugane Lauritzen

From freshwater to saltwater

Smoltification is a crucial part of a salmon's life, where it undergo changes to prepare for migration from freshwater to saltwater. These changes happens in juvenile salmon, and includes changes in gill structure, metabolism and osmoregulation, but also physiological changes like color and shape.

The smolt quality could be measured in multiple ways. Physiological changes like color and shape, and behavior changes can be one indicator to smolt quality. However, quality could also be judged

by looking at ATPase activity in different parts of the smolt. In this case, the gills, kidney and gut.



## Analysis of the ATPase

1. Tissue samples from gills, kidney and gut from salmon smolt was collected, and put in a deep freezer to preserve the tissue.

2. The samples were defrozen before use, cut into small samples and transferred to eppendorf vials (0,5 ml).

3. The mix was then transferred to wells on a microplate, and mixed with a premade assay mixture, one containing Quobain and one without. This makes it possible to analyse differences in ATPase activity.

4. The microplates were placed in a plate reader. This measured the absorbance.

DO NOT USE THIS AREA AS IT WILL DISAPPEAR IN THE POSTER CLAMPS